



CNC Optical Grinding Machines



PRO Series



e Series

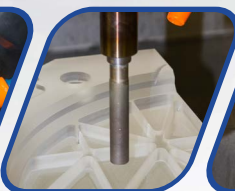


SXL 500

Innovative Machines for Precision Optics and Technical Ceramics



CNC Optical Grinding Machines



Ultrasonic Machining Centers



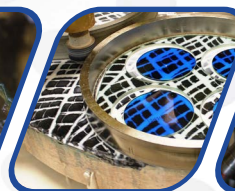
Optical Centering Machines



CNC Spherical Polishing Machines



CNC Asphere/Freeform Polishing Machines



Planetary Polishing Machines



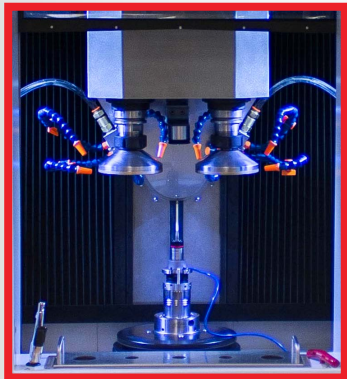
Non-Contact Metrology Solutions

Not just the same old grind.

Improve the quality of your surfaces along with your bottom line. In the world of precision grinding, accuracy, speed, and ease-of-use can coexist. Save time and money with fast job setups, optimal cycle times, and quick turnaround times. Make life easy with user-friendly lens grinding software. And never sacrifice quality by using the CNC optical grinding platform that's right for you. Spheres, aspheres, cylinders, prisms, and freeforms. Glass, ceramics, and hardened steels. Lens sizes from 5-500 mm. Custom machines available that can be tailored to unique jobs. No matter what your application involves, we have the right grinding solution for you.

High Performance Machines

Engineered for precision and repeatability



Twin spindles standard on PRO Series Machines: HSK quick change tooling, ceramic bearings, liquid cooled for better process consistency and control



Rigid granite base for excellent stability (PRO Series machines)



Rigid cast iron base for excellent stability (e Series and SXL 500 machines)



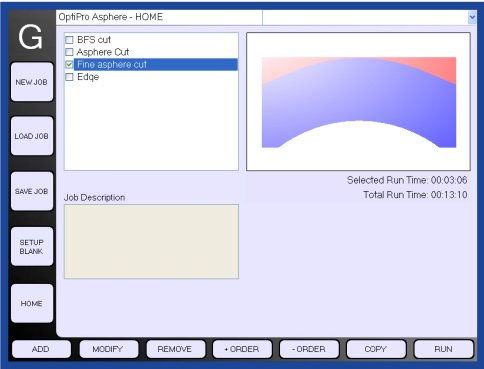
Single or twin spindles available on larger grinding platforms: HSK quick change tooling, ceramic bearings, liquid cooled for better process consistency and control

Intelligent Software Technology

G Series Software: User-friendly yet highly capable



- Clear and simple interface guides operator through each step of the lens generation process
- Corrections can be made to center thickness, radius, diameter, nibs, and aspheric form
- Tool library makes job setup faster by choosing from preloaded tools without having to re-enter tool information for each job
- Process calculators for sag, diameter, and radius are built into the software, eliminating the need for offline calculations



Capabilities

● Standard ○ Available — N/A

PRO Series: CNC lens generators



Standard Features:

- Twin Spindles • Workpiece Probing • Tool Probing

Optional Features:

- Integrated Spherometer • Asphere Fabrication in G Series

Planos	Spheres	Aspheres	Cylinders Acyinders	Prisms	Freeforms
●	●	○	—	—	—

Sphere & asphere part size limit



e Series: 5 axis CNC optical grinders



Standard Features:

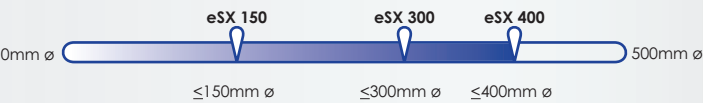
- Workpiece Probing • Tool Probing

Optional Features:

- Twin Spindle (eSX 150 & eSX 300) • Coolant Through Spindle
- Automatic Tool Changer • Integrated Spherometer
- Asphere Fabrication in G Series
- Freeform Fabrication with PROSurf Software

Planos	Spheres	Aspheres	Cylinders Acyinders	Prisms	Freeforms
●	●	○	○	○	○

Sphere & asphere part size limit



SXL 500: Large CNC optical grinder



Standard Features:

- Workpiece Probing • Tool Probing

Optional Features:

- Coolant Through Spindle • Automatic Tool Changer
- Integrated Spherometer • Asphere Fabrication in G Series
- Freeform Fabrication with PROSurf Software

Planos	Spheres	Aspheres	Cylinders Acyinders	Prisms	Freeforms
●	●	○	○	○	○

Sphere & asphere part size limit



Specifications*

	PRO 80 GTS / 160 GTS	eSX 150 / 300 / 400	SXL 500
Workpiece Optimal Diameter Range Maximum Plano Diameter** Maximum Thickness Maximum Diameter of Diagonal Maximum Weight	5-80 mm (.2-3.1") / 10-160 mm (.4-6.3") 100 mm (3.9") / 160 mm (6.3") N/A N/A 15 kg (33 lbs.) / 30 kg (66 lbs.)	5-150 mm (.2-5.9") / 5-300 mm (.2-11.8") / 5-400 mm (.2-15.7") 200 mm (7.9") / 350 mm (13.8") / 450 mm (17.7") N/A N/A 23 kg (51 lbs.) / 129 kg (285 lbs.) / 154 kg (340 lbs.)	10-500 mm (.4-19.7") 500 mm (21.7") N/A N/A 154 kg (340 lbs.)
Work Spindle Spindle Speed Hydro-Expansion Chuck C-Axis Position and Hold	0-2,000 rpm / 0-500 rpm Standard Standard	0-500 rpm / 0-500 rpm / 0-200 rpm Standard Standard	0-200 rpm Standard Standard
Tool Spindle Maximum Tool Diameter Maximum Tool Weight Tool Spindle Speed Spindle Power (Peak) Tool Holder Style	75 mm (3") / 160 mm (6.3") 4.5 kg (9.9 lbs.) 200-20,000 rpm / 0-22,000 rpm 8.7kW (11.6hp) / 8.5kW (11.4hp) HSK63F	125 mm (5") / 250 mm (9.8") / 250 mm (9.8") 6 kg (13.2 lbs.) 1,000-22,000 rpm / 1,000-22,000 rpm / 1,000-22,000 rpm 14.4kW (19.3hp) / 18kW (24.1hp) / 18kW (24.1hp) HSK63F	300 mm (11.8") 6 kg (13.2 lbs.) 1,000 - 22,000 rpm 18kW (24.1hp) HSK63F
Travels X - Axis Travel Y - Axis Travel Z - Axis Travel B - Axis Travel C- Axis Travel	250 mm (9.8") / 360 mm (14.2") 6 mm (.24") 140 mm (5.5") / 180 mm (7.1") -60° to 60° / -90° to 90° 0° to 360°	500 mm (19.6") 400 mm (15.7") 500 mm (19.6") -90° to 90° 0° to 360°	1,200 mm (47.2") 700 mm (27.6") 500 mm (19.7") -90° to 90° 0° to 360°
Machine Dimensions Width Depth Height Weight	1,000 mm (39") / 1,400 mm (55") 1,500 mm (59") / 1,730 mm (68") 2,440 mm (96") 1,600 kg (3,500 lbs.) / 1,950 kg (4,300 lbs.)	2,110 mm (83") 2,515 mm (99") 2,700 mm (106") 3,400 kg (7,500 lbs.)	2,570 mm (101") 3,700 mm (146") 3,020 mm (119") 5,750 kg (12,650 lbs.)
Facility Requirements Electrical Air Supply	480V +/- 5%, 30A / 480V +/- 10%, 57A 100PSI, 5 CFM clean dry air	480V +/- 5%, 57A / 480V +/- 5%, 57A / 480V +/- 5%, 57A 100PSI, 5 CFM clean dry air	480V +/- 5%, 67A 100PSI, 5 CFM clean dry air

* Specifications subject to change. Contact OptiPro for the latest specifications.

** Machine is capable of manufacturing maximum plano size in small volume. For medium and large production quantities of this plano size, consider OptiPro's larger platform.

Unparalleled Dedication to Customer Success

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